Operator's Manual

The UTMB STS (Self-Teaching System) for Cardiac Auscultation

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SAFETY PRECAUTIONS

Please read this information before using the STS System. It applies to the basic System as well as any optional equipment that may be used with the System. In this manual, WARNINGS describes precautions necessary to prevent injury or loss of life. CAUTIONS describes those precautions, procedures, techniques, etc. which are considered essential to emphasize.

WARNING

SHOCK HAZARD: A shock hazard may exist if this System is not properly grounded. The System is designed to operate with a 3-wire AC power system containing a separate ground wire. The ground wire must not be removed or defeated.

WARNING

SHOCK HAZARD: Do not remove protective covers on any components of the Ausculette System; hazardous voltages may be present. All internal adjustments, replacements and initializations must be made by a qualified technician.

WARNING

CLEANING AND CARE: As a general safety precaution, the System should be turned off and the AC power disconnected before performing any cleaning procedures.

CAUTION

AC POWER LIMIT: To avoid potential damage to the internal isolation transformer and other line power components, do not connect external accessories to the AC power outlet strip mounted inside the back door of the cabinet. This AC power outlet strip is only to be used for CardioSim System components mounted within the cabinet and the monitor mounted on top of the cabinet.

CAUTION

CONNECTORS: Do not immerse any of the connectors used in the System in any fluid.

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The UTMB STS System for Teaching Cardiac Auscultation

1.0 Product Description

The STS System is a self-teaching system for learning cardiac auscultation. It was developed by the University of Texas Medical Branch, Galveston, Texas and designed by Cardionics, Inc.

The STS System consists of the following:

- 1 each Sound Reproducer
- 1 each Pulse Reproducer
- 1 each Student Headphones
- 1 each Power Supply
- 1 set of STS Software. Each set consists of:
  - 1 each Lesson 1
  - 1 each Lesson 2
  - 1 each Lesson 3
  - 1 each Lesson 4
  - 1 each Auscultation Evaluation program
- 1 each Student Text Work Book

The software is designed as site license software. That is, it is intended to be installed on the site of the institution so that any student can log in and use the system.

Students can use the system without instructor involvement saving time and the expense of an instructor. Students can expect to be able to recognize all heart sounds and commonly heard murmurs after taking each lesson and the Auscultation Evaluation Program.

2.0 Set up

2.1 Installing the software.

The software installs automatically. PLEASE NOTE; The software takes time to install and there is no indication that it is being loaded. Just be patient and it will install. It should be used on a PC with an XP Operating System.

2.2 Set up of hardware

First, locate the Sound Reproducer. See Figure 1.

1. Connect the Pulse Reproducer to the Sound Reproducer
2. Connect the power supply to the area marked “DC IN”
3. Connect the Line-In to the “headphone” out on the PC.
4. Connect the Student Headphones to the area labeled “Phones”.
5. Connect the power supply to a 110V or 220V wall recepticle

The set up is now complete.

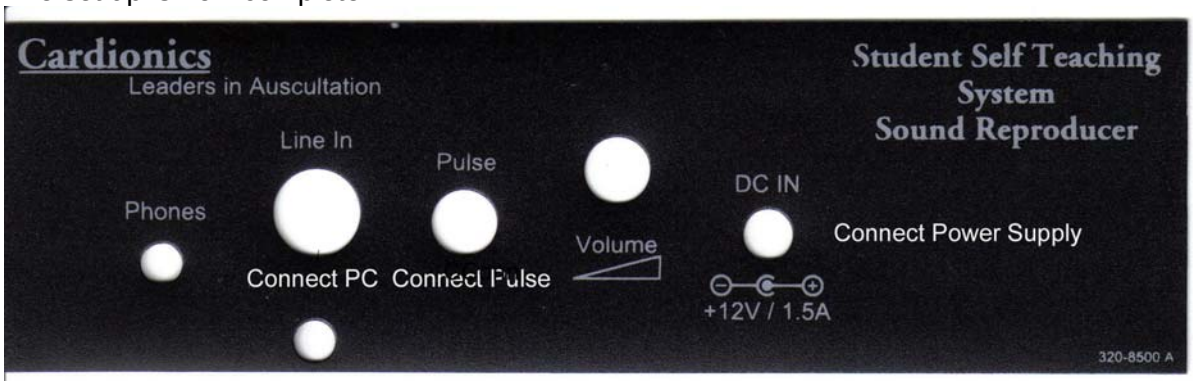

Figure 1 – Sound Reproducer Label

3.0 Using the STS System

Student Text Work Book. It is highly recommended that each student be given a Student Text Work Book. The Work Book is copyrighted by William E. Thornton, M.D. and cannot be copied without violating the copyright. This work book is a key element in learning cardiac auscultation.

Begin with lesson 1. This lesson covers the basics of cardiac auscultation. In each lesson, there are a series of scenes. The scene number is located in the lower left corner just below the picture. To move to the Index (see Figure 2), click on the icon in the lower left section of the screen.

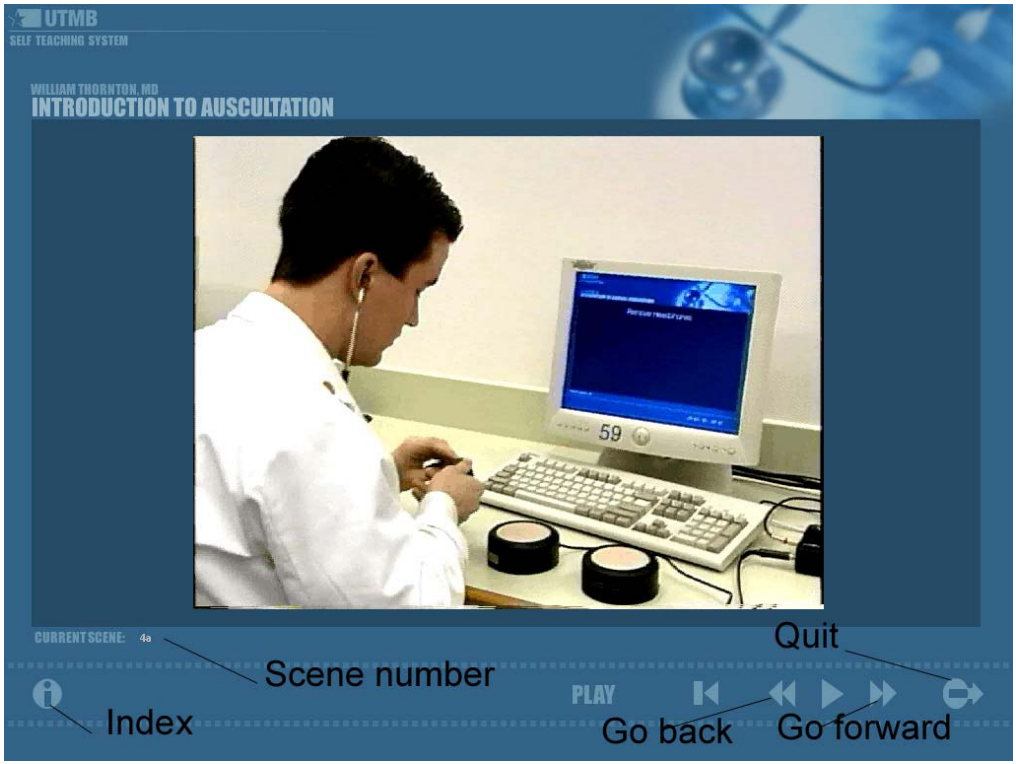

Figure 2 - Screen Shot of STS System

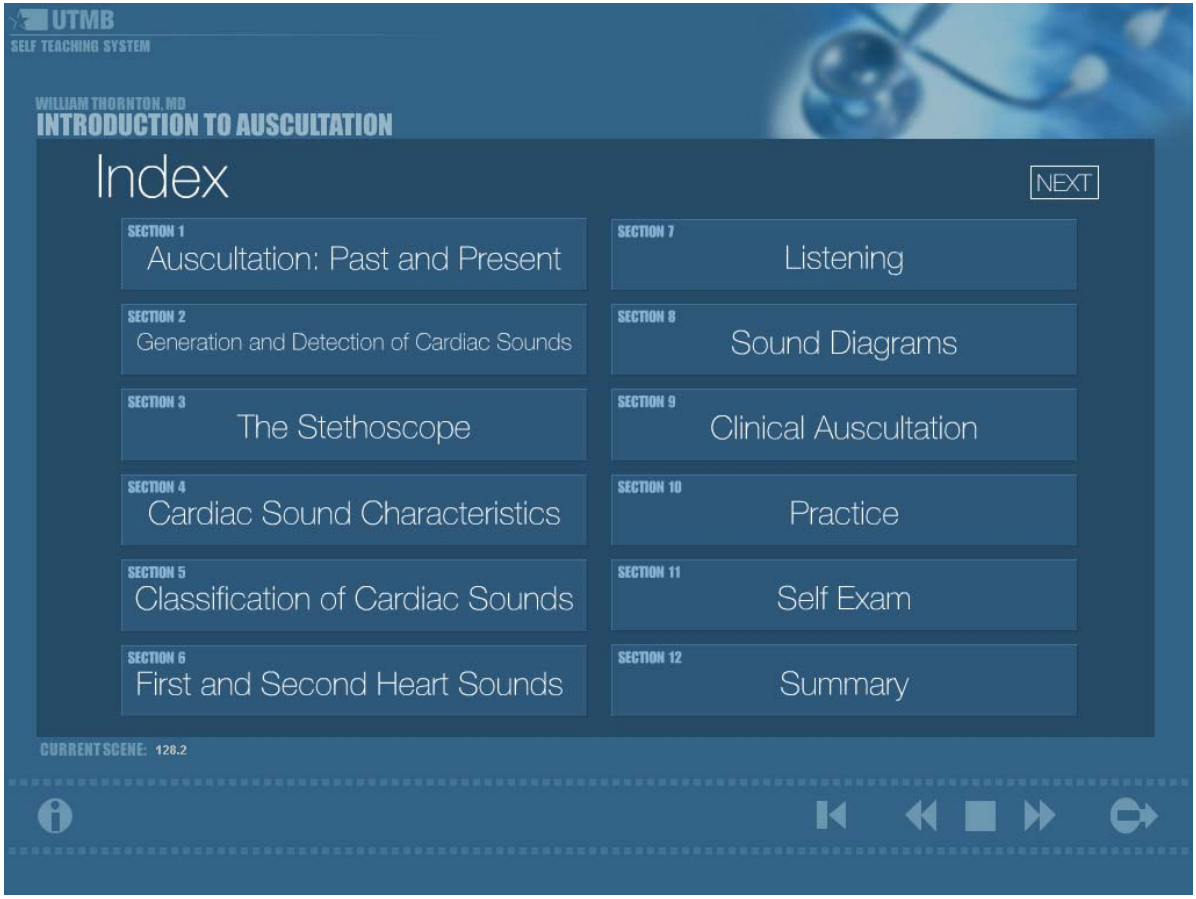

Figure 3 – Index

Put the headphones on and listen to the program. When directed, remove the headphones, put on your stethoscope and place it on the Sound Reproducer. At the same time, palpate the pulse using the Pulse Reproducer.

Figure 4 – Phonocardiogram. Palpate Pulse Reproducer while listening

Figure 5
Place stethoscope on the Sound Reproducer

Figure 6
Palpate the Pulse Reproducer

4.0 Service Manual

Please note. The STS System does not require a Service Manual.

Appendix A Limited Warranty

Cardionics, Inc. warrants this product to be free of manufacturing defects in material and workmanship for a period of one year from the date of original consumer purchase or from an authorized dealer.

What this warranty covers:

1. Cardionics, Inc. warrants the STS System to be free of manufacturing defects in material and workmanship for a period of one (1) year from the date of original consumer purchase from Cardionics or an authorized dealer.
2. This written warranty is limited to the original consumer purchaser, transferable only by written authorization of Cardionics, Inc.
3. All warranties, expressed or implied, made by Cardionics, including warranties of merchantability and fitness are limited to the one (1) year period of this warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
4. This warranty is limited to repair of the product or replacement thereof, at the discretion of Cardionics, Inc. Calibrations are considered normal maintenance and are not included in the one year warranty.

What this warranty does not cover:

1. This warranty does not cover defects or damage resulting from use of the product other than its normal, intended and customary use. This warranty does not cover defects or damages from abnormal use, abnormal conditions, improper storage, exposure to moisture or liquid, unauthorized modifications, repairs made by unauthorized personnel, unauthorized connections (those not described in this manual), misuse, neglect, abuse, accident, alteration, improper installation or other acts which are not the fault of Cardionics, including damage caused by shipping.
2. STS units that have had the serial number, removed or made illegible.
3. Damage resulting from use of non-Cardionics approved accessories.

Policies concerning service.

Shipping charges. The customer shall bear the cost of shipping the product to Cardionics. Cardionics will pay the return freight within the United States. Customers outside the US will be asked to pay for shipping in both directions. This includes both warranty and out-of-warranty service. We suggest that you insure the package

Authorization for return. Before sending equipment for repair, please call Cardionics, at 281-488-5901 or in the U.S. or Canada 1-800-364-5901 for a return authorization number. This will help us track your repair.

Reason for return. Please include a note with your name, address, telephone and email address and what you believe the problem to be.

Packing for return. Equipment requiring repair should be suitably packaged for shipping.

Where to obtain service. Ship package prepaid to Cardionics, Inc., 910 Bay Star Blvd, Webster, Texas 77598 USA. We will endeavor to complete repairs within fifteen (15) working days from date of receipt of product by Cardionics.

Out-of-warranty service. . When a product is returned for service that is out-of-warranty, Cardionics will call you to obtain your authorization prior to making the repair. We will ask for a credit card payment at the time of the call. If the repair is from an authorized Cardionics dealer or institution, Cardionics will ask for a purchase order number.

Consequential Damages

Cardionics, Inc. shall not be liable for incidental or consequential damages arising from the use or failure of this product, including injury to persons or property. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights that may vary from state to state.

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